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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,573	09/01/2006	Stefan Brand	2004DE303	6238
25255 7590 08/04/2009 CLARIANT CORPORATION INTELLECTUAL PROPERTY DEPARTMENT 4000 MONROE ROAD CHARLOTTE, NC 28205				
EXAMINER CAMERON, ERMA C				
ART UNIT 1792		PAPER NUMBER		
MAIL DATE 08/04/2009		DELIVERY MODE PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/591,573

**Applicant(s)**

BRAND ET AL.

**Examiner**

/Erma Cameron/

**Art Unit**

1792

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 and 22-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 22-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date 2/6/2009
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Inventor's Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

#### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-20 and 22-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a) Claims 1 and 20: “catalyst” should be followed by “and”.

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 2, 3 and 12-15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not

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described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The following is not in the specification as filed, and is therefore not enabled:

Claim 2	at least 1% and not more than 100%
Claim 3	as above
Claims 12-15	the mass fraction ranges

***Response to Arguments***

The applicant has argued that the originally filed claims constitute part of the specification. The examiner disagrees. See MPEP 608.01(o): “The meaning of every term used in any of the claims should be apparent from the descriptive portion of the specification...”

The examiner suggests that the terms and subject matter listed above be inserted into the specification at appropriate places.

***Claim Objections***

5. The objection to Claim 21 to under 37 CFR 1.75(c), is withdrawn because claim 21 has been canceled.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The rejection of Claims 1-17 and 19-28 under 35 U.S.C. 103(a) as being unpatentable over Suzuki (US2003/0164113) is withdrawn because of the amendment filed 4/2/2009.

8. Claims 1-9, 11-15 and 17-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 899091.

'091 teaches coating a plastic surface with a xylene solution of perhydropolysilazane with a metal catalyst (at 0.01-10 wt%) present, and curing at up to 180 degrees C to a thickness of 0.05 to 10 microns [0110]-[0131] [0169]. The thickness and curing temperature overlap with the ranges claimed by applicant.

***Response to Arguments***

The applicant has argued that '091 does not teach cobinders. The examiner disagrees. '091 teaches that an organosilazane may be present as well as perhydrosilazane [0110]-[0117], thus meeting the limitation of claim 2. In addition, '091 teaches that an additive may be present, such as a synthetic resin, such as a homopolymer or copolymer of (meth)acrylate, or the polyfunctional or monofunctional compounds mentioned earlier in the reference [0130]. These compounds include acrylates and epoxies [0022] [0029] [0045].

9. Claims 10, 16 and 24-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 899091 taken in view of Suzuki et al (US2003/0164113).

‘091 is applied here for the reasons given above.

‘091 does not teach that its composition is applied to wheels.

‘113 teaches a perhydrosilazane-based composition that is applied to wheels, glass, plastic and metal surfaces (see Abstract).

It would have been obvious to one of ordinary skill in the art to have applied the perhydrosilazane composition of ‘091 to the substrates of ‘113 because of the teaching of ‘113 that its perhydrosilazane-based composition is compatible with many surfaces such as wheels.

10. Claims 1-3, 5-20 and 22-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 11-116815.

See translation and abstracts.

‘815 teaches using both perhydro- and organo-silazanes, along with a catalytic amount (0.1-10 wt %) of a N-heterocyclic compound, and a solvent as a coating composition. The MW is 100-50000 which overlaps with applicant’s claimed range. Heating after application is 25-100 C. The substrate is glass, plastic or metal (which would be inclusive of Al wheel rims). The coating thickness is up to 3 microns. [0006]-[0008] [0011]-[0017] [0034]-[0039] [0043]-[0045].

11. Claims 1-3, 5-20 and 22-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO2004/039904.

'904 teaches applying both inorganic (perhydro) and organic polysilazanes, solvent and a catalyst such as a N-heterocyclic compound to substrates such as automobile wheels and other aluminum surfaces. The coating is .1-2 microns thick. The MW of the perhydrosilazane is 600-3000. Drying is at low temperatures such as 45 C. The thickness overlaps with the range claimed by applicant. See Abstract, pages 4-11, 20.

12. Claims 1-3, 5, 7-9, 11-15, 17-20 and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shindo (US2002/0034885).

'885 teaches applying both perhydro and organo silazanes, solvent, plus a catalyst to a metal surface such as aluminum, followed by curing at 80-400 C. The MW of the silazanes is 500-2500. [0005] [0008] [0022] [0072]-[0075] [0179] [0184] [0185]. '885 does not teach that the thickness is 2-20 microns, but it would have been obvious to one of ordinary skill to have optimized the thickness through no more than routine experimentation depending on the eventual use of the coating.

### ***Double Patenting***

13. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

14. Claims 2, 12 and 13 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 3 of copending Application No. 11/667654. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims overlap.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

15. Claims 2, 12 and 13 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 3 of copending



Application No. 11/791550. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims overlap.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

16. Claims 2, 12 and 13 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 3 of copending Application No. 11/884856. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims overlap.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

17. Claims 2, 12 and 13 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 8 of copending Application No. 11/991718. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims overlap.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

18. Claims 2, 12 and 13 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-2 and 4 of copending Application No. 12/084191. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims overlap.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

#### ***Response to Arguments***

The applicant has argued that the amendments filed 4/2/2009 requiring the presence of cobinders makes the present claims not obvious over any of the above patent applications. The examiner disagrees. Each of the above applications allows for a mixture of perhydropolysilazane and organosilazane. Therefore, the above rejections have been changed to claims 2, 12 and 13 of the instant application, which requires perhydropolysilazane and also organosilazane as cobinder.

#### ***Conclusion***

19. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to /Erma Cameron/ whose telephone number is 571-272-1416. The examiner can normally be reached on 8:30-6:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Erma Cameron/  
Primary Examiner  
Art Unit 1792

August 3, 2009

